



TEMARIO

POSGRADO EN CIENCIAS BIOLÓGICAS

UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO
PROGRAMA DE POSGRADO EN CIENCIAS BIOLÓGICAS

Denominación de la actividad académica (completa): INMUNOVIGILANCIA y CÁNCER. EL ROL DE LA IgM

Clave: (no llenar)	Semestre: 2024-2	Campo de conocimiento: BIOQUÍMICA	Número de Créditos: 8 Créditos
Carácter OPTATIVA	Horas 64	Horas por semana 0	Horas por semestre 5
Modalidad CURSO	Duración del curso SEMESTRAL		

Seriación indicativa u obligatoria antecedente, si es el caso:
NO APLICA

Seriación indicativa u obligatoria subseciente, si es el caso:
NO APLICA

Objetivo general:

CONOCER LOS FACTORES INMUNOLÓGICOS PREVENTIVOS DEL CÁNCER

Objetivos específicos: (en si caso)

**CONOCER EL PAPEL DE LA IgM EN EL RECONOCIMIENTO DE ANTIGENOS TUMORALES DE EXPRESIÓN
TEMPRANA**

Temario	Horas	
	Teóricas	Prácticas
Unidad 1 ESTRUCTURA y CARACTERÍSTICAS DE LA IgM.	20	0
1.1 Producción de IgM. Protección contra la infección bacteriana 1.2 Natural serum IgM 1.3 IgM natural en recién nacidos y adultos sanos 1.4 Uso terapéutico de anticuerpos IgM 1.5 IgM y sus receptores: aspectos estructurales y funcionales 1.6 IgM es un pentágono asimétrico 1.7 Características clave del anticuerpo IgM y comparación con el anticuerpo IgG		
Unidad 2 ANTICUERPOS NATURALES DEL TIPO IgM Y LA VIGILANCIA INMUNOLÓGICA	30	0
2.1 Papel de los anticuerpos IgM naturales en la respuesta inmune. 2.2 Anticuerpos naturales e inmunidad protectora. 2.3 Anticuerpos IgM naturales e inmunovigilancia 2.4 El papel de las células B-1 y B-2 en la protección inmune.		
Unidad 3 ANTICUERPOS IgM y CÁNCER.	20	0
3.1 Anticuerpos igm en el suero como biomarcadores para la detección temprana del		



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cáncer		
3.2 Marcadores tumorales en cáncer de mama		
3.3 ¿Están implicados los anticuerpos naturales en la defensa tumoral?		
3.4 Inmunoglobulina M: una antigua arma inmunológica		
Total de horas teóricas	70	
Total de horas prácticas		0
Suma total de horas (debe coincidir con el total de horas al semestre)	70	0

Bibliografía básica

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Bibliografía complementaria

(se recomienda utilizar bibliografía actualizada)

Sugerencias didácticas:

(marcar con una X la sugerencia didáctica que se utilizará para abordar los temas. Es importante tomar en cuenta que si la actividad tiene horas prácticas en las sugerencias deberá haber herramientas prácticas para el aprendizaje de los temas)

- Exposición oral
- Exposición audiovisual
- Ejercicios dentro de clase
- Ejercicios fuera del aula
- Seminarios
- Lecturas obligatorias
- Trabajos de investigación
- Prácticas de taller o laboratorio
- Prácticas de campo
- Otros (indicar cuáles)

Mecanismos de evaluación del aprendizaje de los alumnos:

(marcar con una X el mecanismo que se utilizará para evaluar el aprendizaje. Se recomienda que para la evaluación sean tomadas en cuenta las sugerencias didácticas señaladas)

- Exámenes parciales
- Examen final escrito
- Tareas y trabajos fuera del aula
- Exposición de seminarios por los alumnos
- Participación en clase
- Asistencia
- Seminario
- Otros (indicar cuáles)

Línea de investigación:



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LINEA DE INVESTIGACION DEL Dr. PEDRO OSTOA: IgM y Cáncer

Perfil profesiográfico

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